Panasonic

6 SERIES DOME NETWORK CAMERAS

- High resolution: 1920 x 1080 Full HD at up to 60fps H.264 (WV-SFV631L); 1280 x 960 HD at up to 60fps H.264 (WV-SFV611L)
- Enhanced Super Dynamic and Adaptive Black Stretch (ABS) technologies deliver 133dB wider dynamic range compared to conventional cameras
- High sensitivity with Multi Processing Noise Reduction (MNR)
- Auto Back Focus and Motorized Zoom (2.8-10mm) lens ensures easy installation
- Double SDXC/SDHC/SD Memory card slots for manual recording (H.264 / JPEG), alarm recording (H.264 / JPEG) and backup recording upon network failure (H.264 / JPEG)
- Built-in IR LEDs make it possible to capture images at 0 lux
- Super Chroma Compensation (SCC) ensures excellent color reproduction even when the IR cut filter is removed to gain sensitivity under low light

WV-SFV611L

WV-SFV631L

ONVIF VIQS H.264 JPEG day/night Vandal Resistant NO HUMIDIFICATION

IP66 standard Auto Back Focus SD ENHANCED Super Dynamic FULL HD 1080/60p HD 720/60p

Superior Image Quality for Challenging Conditions

The new Panasonic 6 Series i-PRO camera line features next-generation UniPhier® LSI processors and 60 frames per second performance in both 720p and 1080p models. The new platform offers Enhanced Super Dynamic technology enabling an impressive 133dB video dynamic range, delivering outstanding performance even in the most dynamic and challenging lighting conditions. The new cameras all have the ability to encode up to four H.264 streams simultaneously, and feature super-high sensitivity in low light conditions, generating usable color video at less than .01 lux illumination. Dual SDXC memory card slots are also supported for high-capacity edge recording.

ENHANCED SUPER DYNAMIC RANGE

Enhanced Super Dynamic: 133db Wide Dynamic Range

Conventional Super Dynamic Range

6 Series

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CAMERA	
Image Sensor	Approx.1/3 type MOS Sensor
Effective Pixels	WV-SFV631L: Approx. 2.4 megapixel WV-SFV611L: Approx. 1.4 megapixel
Scanning Mode	Progressive scan
Scanning Area	WV-SFV631L: 5.421 mm (H) x 3.405 mm (V) {7/32 inches (H) x 1/8 inches (V)} WV-SFV611L: 4.860 mm (H) x 3.904 mm (V) {3/16 inches (H) x 5/32 inches (V)}
Minimum Illumination	WV-SFV631L: Color: less than 0.04 lx, BW: 0.003 lx (F1.3, Maximum shutter: Max. 1/30s, Gain : On(High)) Color: less than 0.005 lx, BW: 0.001 lx (F1.3, Maximum shutter: Max. 16/30s, Gain : On(High))1 WV-SFV611L: Color: less than 0.01 lx, BW: 0.0007 lx (F1.3, Maximum shutter: Max.: Off (1/30s), Gain : On(High)) Color: less than 0.0025 lx, BW: 0.00 1lx (F1.3, Maximum shutter: Max.: Max. 16/30s, Gain: On(High))1
IR LED Light	Off/Auto (High/Mid/Low)
IR LED Irradiation Distance	Approx. 30 m (98.43 feet)
White Balance	AWC (2,000 – 10,000 K), ATW1 (2,700 – 6,000 K), ATW2 (2,000 – 6,000 K)
Light Control Mode	Outdoor scene: Automatic integration of ALC and ELC Indoor scene (50 Hz): Automatic integration of ALC and ELC (up to 1/100 s) Indoor scene (60 Hz): Automatic integration of ALC and ELC (up to 1/120 s)
Shutter Speed	(2 megapixel (16:9)(60 fps mode)/ 1.3 megapixel (16:9)(60 fps mode)) OFF(1/60), 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000,1/10000 Other than (2 megapixel (16:9)(60 fps mode)/ 1.3 megapixel (16:9)(60 fps mode)) OFF(1/30), 3/100, 3/120, 2/100, 2/120, 1/100, 1/120, 1/250,1/500, 1/1000, 1/2000, 1/4000, 1/10000
Super Dynamic	On(High) / On(Normal) / Off
Face Super Dynamic	ON / OFF (Only at Super Dynamic: ON)
Adaptive Black Stretch	ON / OFF
Fog Compensation	ON / OFF (only when Super Dynamic / Adaptive Black Stretch: Off)
AGC	ON (LOW, MID, HIGH) / OFF
Electronic Sensitivity UP	OFF / AUTO (Max. 2x (2/30 s), 4x (4/30 s), 6x (6/30 s), 10x (10/30 s), 16x (16/30 s))
Day and Night (IR)	Mode: AUTO1 / AUTO2 / AUTO3 / ON/OFF, Level : High / Low, with external control
Dynamic Range	133 dB typ. (Super Dynamic: ON, Light Control Mode : indoor)
Digital Noise Reduction	High / Low
Video Motion Detection	4 areas, Sensitivity: 15 steps, Detection size: 10 steps
Privacy Zone	Up to 8 zones
VIQS	Up to 8 zones
Camera Title (OSD)	Up to 20 characters (alphanumeric characters, marks)
Electric Zoom	TELE / WIDE, Auto Coarse adjustment of Focus
Focus Adjustment	ABF / MANUAL (HTML only)
Lens Distortion Compensation	256 steps
LENS	
Vari Focal Length	2.8 – 10mm (Tentative)
Angular Field of View	WV-SFV631L (16 : 9 mode) Horizontal: 30.45° (TELE) – 102.55° (WIDE) Vertical: 17.17° (TELE) – 56.03° (WIDE) (4 : 3 mode) Horizontal: 25.40° (TELE) – 84.28° (WIDE) Vertical: 19.08° (TELE) – 62.43° (WIDE) WV-SFV611L (16 : 9 mode) Horizontal: 28.05° (TELE) – 93.72° (WIDE) Vertical: 15.85° (TELE) – 51.40° (WIDE) (4 : 3 mode) Horizontal: 28.05° (TELE) – 93.72° (WIDE) Vertical: 21.08° (TELE) – 69.30° (WIDE)
Maximum Aperture Ratio	1 : 1.3 (WIDE) – 1 : 3.0 (TELE)
Focusing Range	0.3 m –
ADJUSTING ANGLE	
Horizontal	±180°
Vertical	0-87°
Image Tilt Adjustment Range	-45° (Left) to +300° (Right)
BROWSER GUI	
Cropping	H.264(1) / H.264(2) / H.264(3) / H.264(all) / JPEG(1) / JPEG(2) / JPEG(3) Up to 4 image capture areas can be specified
Camera Control	Brightness, AUX ON / OFF
Display Mode	Spot, Quad: Image from 16 cameras can be displayed in 4 different quad screens or 16 split screen (JPEG only). 20 characters camera title available.
Digital Zoom	1x, 2x, 4x controlled by browser GUI
Camera Title	Up to 20 alphanumeric characters
Clock Display	Time: 12H/24H, Date : 5 formats on the browser, Summer time (Manual)
Alarm Control	Reset
One Shot Capture	A still picture will be displayed on a newly opened window
Audio	Mic (Line) Input: ON / OFF Volume adjustment: Low / Middle / High, Audio Output: ON / OFF Volume adjustment: Low / Middle / High
SD Memory Data Download	Still or motion images recorded in the SDXC/SDHC/SD memory card can be downloaded
GUI / Setup Menu Language	English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese
System Log	Up to 100 (Internal) Up to 4,000 (SDXC/SDHC/SD memory when the recording format is set to JPEG.) error logs
Supported OS[2]	Microsoft® Windows® 8, Microsoft® Windows® 7, Microsoft® Windows Vista®
Supported Browser	Windows® Internet Explorer® 10.0 (32 bit), Windows® Internet Explorer® 9.0 (32 bit) Windows® Internet Explorer® 8.0 (32 bit), Windows® Internet Explorer® 7.0 (32 bit)

NETWORK		
Network IF	10Base-T / 100Base-TX, RJ-45 connector	
Image Resolution	Image Capture Mode: 2 megapixel (16:9) (30/60 fps)	WV-SFV631L: 1,920 x 1,080 / 1,280 x 720 / 640 x 360 / 320 x 180 / 160 x 90
	Image Capture Mode: 2 megapixel (4:3) (30fps)	WV-SFV631L: 1,600 x 1,200 / 1,280 x 960 / 800 x 600 / 640 x 480 / 400 x 300 / 320 x 240 / 160 x 120
	Image Capture Mode: 3 megapixel (4:3) (30fps)	WV-SFV631L: 2,048 x 1,536* / 1,280 x 960 / 800 x 600 / 640 x 480 / 400 x 30 / 320 x 240 / 160 x 120 * Used by super resolution techniques
	Image Capture Mode: 1.3 megapixel (16:9) (30/60fps)	WV-SFV611L: 1,280 x 720 / 640 x 360 / 320 x 180 / 160 x 90
	Image Capture Mode: 1.3 megapixel (4:3) (30fps)	WV-SFV611L: 1,280 x 960 / 800 x 600 / 640 x 480 / 400 x 300 / 320 x 240 / 160 x 120
H.2643	Transmission Mode	Constant bit rate / Best effort / Advanced VBR
	Frame Rate	1 / 3 / 5 / 7.5 / 10 / 12 / 15 / 20 / 30 / 60 fps
	Bit Rate/Client	64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 1,536 / 2,048 / 3,072 / 4,096 / 6,144 / 8,192 / 10,240 / 12,288 / 14,336 / 16,384 / 20,480 / 24,576 / 30,720 / 40,960 kbps
	Image Quality	LOW / NORMAL / FINE
	Transmission interval	0.1 fps - 60 fps
	Transmission Type	UNICAST / MULTICAST
JPEG	Image Quality	10 steps
	Transmission interval	0.1 fps - 60 fps (JPEG frame rate will be restricted when displaying both JPEG and H.264 images.)
	Transmission Type	PULL / PUSH
Audio Compression	G.726 (ADPCM) 32 kbps / 16 kbps, G.711 64 kbps / AAC-LC* * AAC (Advanced Audio Coding - Low Complexity) is only used when recording audio on an SD memory card. With iris position control	
Audio Mode	OFF / Mic (Line) input / Audio output / Interactive (Half duplex) / Interactive (Full duplex)	
Authentication for Audio	Level 1 only / Level 2 higher / All users	
Total Bit Rate	64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 2,048 / 4,096 / 8,192 kbps / Unlimited	
Supported Protocol	IPv6: TCP/IP, UDP/IP, HTTP, HTTPS, RTP, FTP, SMTP, DNS, NTP, SNMP, DHCPv6, RTP, MLD, ICMP, ARP IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP,FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP, IGMP, ICMP, ARP	
FTP Client	Alarm image transmission, FTP periodic transmission (When the FTP transmission is failed, backup on an optional SDXC/SDHC/SD memory card is available.)	
No. of Simultaneous Users	Up to 14 users (Depends on network conditions)	
SDXC/SDHC/SD Memory Card (Option)	H.264 recording: Manual REC / Alarm REC (Pre/Post) / Schedule REC/Backup upon network failure compatible JPEG recording: Manual REC / Alarm REC (Pre/Post) / Backup upon network failure compatible SD (SDHC/SDXC) card: Panasonic 2 GB, 4 GB*, 8 GB*, 16 GB*, 32 GB*, 64GB** model *SDHC card, ** SDXC card (except miniSD card and microSD card)	
Employment of Two SD Cards	Dual Recording for Redundancy Series Recording for long time	
Cellular Phone Compatibility	JPEG image	
Mobile Terminal Compatibility	iPad, iPhone, iPod touch (iOS 4.2.1 or later), Android™ Terminal	
ALARM		
Alarm Source	3 terminals input, VMD, Command alarm	
Alarm Actions	SDXC/SDHC/SD memory recording, E-mail notification, Indication on browser, FTP image transfer, Panasonic protocol output	
Alarm Log	With SDXC/SDHC/SD memory card: 5,000 logs, Without SDXC/SDHC/SD memory card: 1,000 logs	
Schedule	Alarm / VMD / Access permission / H.264 recording / Scene file	
INPUT/OUTPUT		
Monitor Output (for adjustment)	VBS: 1.0 V (p-p)/75 NTSC / PAL composite, 3.5mm mini jack	
Microphone/Line Input	MIC IN and Line IN are selectable. ø3.5 mm monaural mini jack (monaural input) (Applicable microphone: Plug-in power type) Supply voltage: 2.5 V ±0.5 V Input impedance: approx. 2 kΩ	
Audio Output	3.5 mm stereo mini jack (monaural output), Output impedance: Approx. 600 Ω (unbalanced)	
External I/O Terminals	ALARM IN 1/DAY/NIGHT IN, ALARM IN 2/ALARM OUT, ALARM IN 3/AUX OUT	
GENERAL		
Safety	UL (UL60950-1), C-UL (CAN/CSA C22.2 No.60950-1), CE, IEC60950-1	
EMS	FCC (Part15 ClassA), ICES003 ClassA, EN55022 ClassB, EN55024	
Power Source and Power Consumption	When IR LED is ON WV-SFV631L DC power supply: 12 V DC/1080 mA/Approx. 12.9 W PoE Device: 48 V DC/270 mA/Approx. 12.95 W* (Class 0 device) WV-SFV611L DC power supply: 12 V DC/1010 mA/Approx. 12.1 W PoE Device: 48 V DC/270 mA/Approx. 12.95 W* (Class 0 device) *Maximum power consumption on the camera power input side. **ONLY CONNECT 12 V DC CLASS 2 POWER SUPPLY.	
Ambient Operating Temperature	–45 °C – +50 °C (-49 °F – 122 °F)	
Ambient Operating Humidity	20 – 90 % (no condensation)	
Impact Protection	IEC 60068-2-75 test Eh, 50 J / IEC 62262 IK10	
Water and Dust Resistance	IP66, IEC60529 measuring standard compatible	
Shock Resistance	Compliant with 50 J IEC60068-2-75	
Dimensions	164 mm x 139 mm (H) {ø6-15/32 inches x 5-15/32 inches (H)} Dome radius 42 mm {1-21/32 inches}	
Mass (approx.)	1.6kg {3.53 lbs.}	
Finish	Main body : Aluminum die cast, light gray / Dome section: Clear polycarbonate resin	

[1]Converted value

[2]Refer to "Notes on Windows Vista® / Windows® 7 / Windows® 8" on the provided CD-ROM for further information about system requirements for a PC and precautions when using Microsoft® Windows® 8 or Microsoft® Windows® 7 or Microsoft® Windows Vista®.

[3]Transmission for 4 streams can be individually set.

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